

The Heterodyne

Newsletter of the West Valley Amateur Radio Association

February Meeting

***Troubleshooting Electronic
Circuits by Ron Quan, KI6AZB***

2020 Estimated Budget

***Wednesday, February 12
Meeting Starts at 7pm***

Meeting Location:
American Red Cross,
Silicon Valley Chapter
2731 N. First Street at Plumeria Dr
(southwest corner) in San Jose

WVARA Repeaters (W6PIY)		
Band	Frequency	PL
6 Meters	52.580- MHz	151.4 Hz
2 Meters	147.39+ MHz	151.4 Hz
1.25 Meters	223.96- MHz	156.7 Hz
0.70 Meter	441.35+ MHz	88.5 Hz
0.23 Meter	1286.2- MHz	100 Hz

Club Net

WVARA's club net is on the W6PIY repeaters each Tuesday at 8:30 pm. All repeaters are linked together during the net. The net script can be found at www.wvara.org/net.html .

Visitors Are Welcome!

New Members

***The following new members
joined WVARA recently:***

Brian Whitaker, AG6WR

Bob Amstadt, KI6E

Alyson Amstadt, KJ6FHP

Mark Eastus, KN6BAU

Vamsi Gunda, KN6GUG

Steve Burnett, WB6JHI

Welcome!!!

February 12 Meeting

Troubleshooting Electronic Circuits: A Guide to Learning Analog Electronics by Ron Quan, KI6AZB

The next WVARA meeting will be 7pm on Wednesday, February 12. This will be at our usual meeting place: the Red Cross Building on 2731 N. First Street (Meeting Room #5) in San Jose. Entry is via the side door on the west side of the building — look for the red WVARA sign. Visitors are welcome, and of course there will be chocolate chip cookies. If you haven't been to the Red Cross, "talk-in" is usually available on the Association's repeaters. Best choice would be 2m/220.

Several of us meet for dinner near the Red Cross around 5:45pm prior to the meeting at Dish-N-Dash (2551 N. 1st St. San Jose): <https://dishdash.com/> Feel free to drop by and join us for dinner!

WVARA members also dine at Panera Bread at Coleman Avenue at Autumn Parkway, at the San Jose Market Center at 6 p.m.

At this month's meeting Ron Quan, KI6AZB, will give a presentation based on his latest book, "Troubleshooting Electronic Circuits: A Guide to Learning Analog Electronics". Ron's presentation will cover selected topics from the book, including electronic components, LEDs, and ham radio circuits such as oscillators, Software Defined Radio mixers and audio amplifiers. Ron will emphasize how to debug circuit problems and fix via re-design.



Ron built his first crystal radio in the mid 1960s. Since then he has repaired radios, Hi Fi stereos, TVs, oscilloscopes, signal generators, lab power supplies, and broadcast equipment. Before passing his Extra Class License, he was a broadcast engineer in the 1970s for radio stations KALX FM and KNEW AM. He received his engineering degree that led to working at Ampex, Sony, and finally Macrovision where he was a Principal Engineer. Ron has written three electronics books and has taught at the university level on analog RF communications systems, signals, and circuits.

Looking forward to seeing you at next Wednesday's meeting!
Jim, K6EI
WVARA Vice President

Annual Field Day Brainstorm Lunch

Our annual Field Day Brainstorm Lunch will be 12:30pm on Sunday, Feb 23. We'll meet at Burger King (W. Trimble Road just north of Hwy 101 in Santa Clara). Bring your thoughts on what you liked last year, what could be improved, and any ideas that you'd like us to consider for 2020.

73 de Jim K6EI

WVARA Net Check-Ins (W6PIY)						
Tuesdays at 8:30 PM						
Call Sign	Name	1/7/20	1/14/20	1/21/20	1/28/20	2/4/20
Total		11	10	19	11	15
AA6RB	Roy				X	
AD6CL	Chuck			X		
AF6AE	Bill		X			X
AG6YO	Kevin				X	X
K0XI	Bobby			X		
K6CES	Chuck		X			
K6EI	Jim	X	X	X	X	X
KC6ZKT	Steve			X		X
KC7XE	Stan					X
KE6RRU	Dan			X		
KF6EMB	Svend	X	X	X	X	X
KI6E	Bob		X		X	
KJ7JIL	Sharon	X				
KK6HPF	Ross	X			X	X
KK6VF	Kevin	NET	NET	X	NET	NET
KM6CLI	Greg		X			
KM6DAC	Cameron			NET		
KM6GUG				X		
KN6ELZ	James					X
N6BTU	Wayne			X		X
N6FFC	Bill			X		
N6FYR	Matt	X	X			
W6ESL	Tom	X		X		X
W6IA	Mark	X	X	X	X	X
W6PK	Phil			X		
W8RJL	Ron				X	X
W9KKN	Bill			X		
WB6JHI	Steve	X		X	X	
WB6KHP	Dave	X	X	X	X	X
WD9DD	Russ			X		X
WR3K	Greg	X				
WR6Z	Dave			X		

WVARA's Winter Field Day ***Steve Sergeant, KC6ZKT***

Winter Field Day Was So Cool!

I heard the call clearly over the low background noise of our remote, off-grid, ridge-top site. Alpha charlie nine tango oscar was calling CQ on 3,825 kHz. It was 10:59pm; the end of my Saturday evening shift at WVARA's Winter Field Day 2020 site. I was operating 10W SSB on an Elecraft KX3, on a somewhat unpredictable OCF dipole. It took me five or six repeats of my call, or parts of it, before he repeated it back correctly. But by the end of the exchange, he had my "4O SCV" and I had his "1H WI". And thus I made my longest-distance contact for Winter Field Day 2020.

This was WVARA's first formal participation in Winter Field Day (or "WFD", for short). This year's WFD ran from 1900 UTC (11am PST) Saturday, January 25th, to 1900 UTC (11am PST) Sunday, January 26th.

WFD was first conceived as an emergency communication exercise by members of the Spa Amateur Radio Association ("SPAR") in Arkansas. The first WFD event was held on January 13-14, 2007. But as the event grew, support by SPAR waned. So following the 2015 WFD, a new non-profit organization was formed, the Winter Field Day Association. With a more sustainable organization, and a refined set of rules, the popularity of WFD has only grown since.

Our site was the so-called "overflow lot" of Henry W. Coe State Park. We reserved the entire forty by eighty yard gravel lot for the whole of the weekend. The site is a half hour drive from downtown Morgan Hill, about a half mile from the park headquarters and their main campground. We had good horizons due East, South, and West, but we had an obstructing hill to the north.

As the organizer of WVARA's effort at WFD, I wanted certain things: I wanted a simpler, easier-to-set-up set of stations than our summer ARRL field day. I wanted stations that could be ready to go in a couple of hours. (Actually, the WFD rules limit station set-up time to a total of twelve hours.) So K0XI, K6EI, and I worked out a plan with four stations in two shelters: Two HF stations in a large tent of mine operating SSB and CW, respectively, and two stations in the K0XI van, one operating HF digital, and one operating VHF and UHF in any available mode.

We had a total of ten WVARA members who came up to the hill to participate. A few of us camped in the park's campground. While others drove up for one or more three-hour shifts. One hearty soul showed up on Saturday morning, pulled an all-nighter, and didn't take off until Sunday when we were nearly torn-down. We arranged our meals in potluck style, but I think perhaps KD6UME and I over-achieved in that department.

We also had a special visitor when we first started operating for the event. Wayne Burdick, N6KR, one of the founders of Elecraft, dropped-in on our site on his way to do a little backcountry operation with his own KX2. He seemed impressed with the set-up. He also gave us a tip about a KX3 menu option "RX ISO" which reduces interference by the VFO between transceivers in close proximity. Later that day, Wayne took a hike in Coe Park, and wrote a message to the Elecraft user community about his WFD remote operation experience (see sidebar).

As WVARA's first attempt at WFD, we expected there to be many lessons learned; and we weren't disappointed. We put together a pretty good list that's too long to include here. But interestingly, none of our problems were related to the weather or winter conditions. Nobody was too cold, nobody suffered hypothermia nor frostbite. Rather our challenges were around the usual stuff, radio gear that hadn't been tested together, antennas, power supplies, and software hassles. Our greatest technical problem was that we had several long wire antennas packed into a relatively tight space given their length, and so we had some interference between stations.

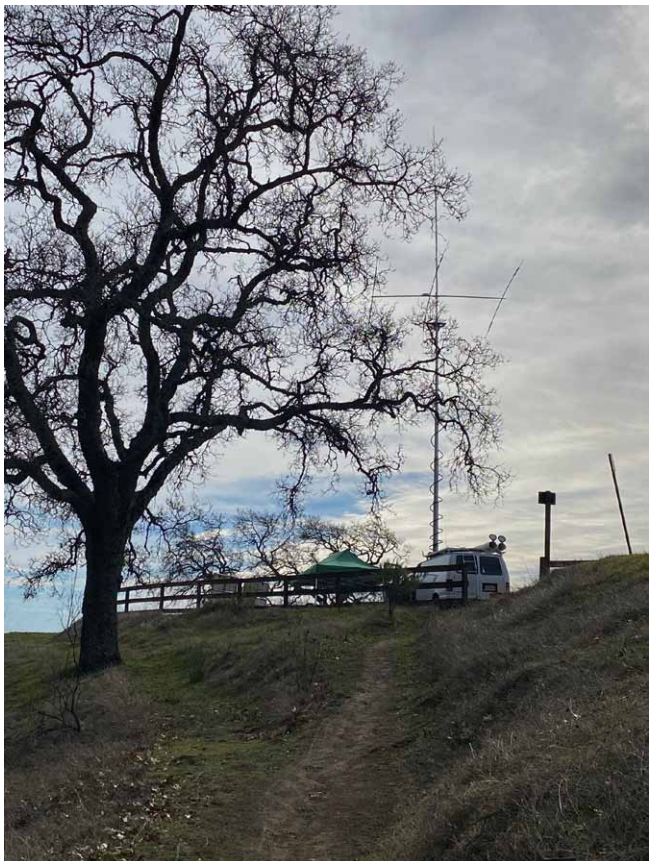
Another of my goals for WFD, and I expected it to be aspirational and frankly quite a stretch, was for us to come-in within the top ten scoring outdoor stations. We don't have official numbers yet, but if every one of our QSOs count, we could be in the running.

So I'm excited about doing another WFD next year, on January 30, 2021. I hope our pioneering experience gives a few more of you encouragement to join us. Watch this space, and our meetings, for future plans.

Steve Sergeant, KC6ZKT
WVARA Director

Photos by Steve, KC6ZKT and Brian, NT6F:





Photos by Jim, K6EI and Tim, KN6FGH:



Winter Field Day -- Memorable QSO

By Wayne Burdick, N6KR

My son and I hiked a few miles into Henry Coe state park yesterday, setting up a winter FD station (KX2) at a spot overlooking an idyllic pond full of bullfrogs. The weather was, ironically, just about perfect: 60 F, no wind, blue skies. I regret that we weren't able to share the pain of those who experienced more winterish conditions.

For an antenna, I tossed 20 feet of wire into an oak tree. When I hooked it up to the rig I was pleased to find many FD stations on both CW and SSB. Seems that this event is reaching critical mass.

One of my favorite things to do during ARRL FD is to make a few RTTY contacts, using the keyer paddle on the rig and letting the radio do the conversion to FSK. (The K3/K3S, KX2, and KX3 all have this feature.) While I didn't find any winter FD stations operating RTTY, I did find JA6ZPR on 14.083 operating in a BARTG contest.

Given that I was running only 10 W to a low random wire, I was surprised when he came right back to me. This is a new QRP RTTY DX record for me, and I'll note that the QSO was not computer-mediated in any way ;)

On the drive home we stopped at the Anderson reservoir overlook and were rewarded with two nearly simultaneous nature sightings. First we saw a brightly colored kestrel perched atop a tree near the water's edge. Then, seconds later, a bobcat appeared on the other side of the road. My son is an avid photographer and was able to get great shots of both.

To me this just proves the benefit of having two Field Days per year--more time outdoors, more chance to "re-wild" amateur radio. I hope there's even greater participation in WFD in the future.

73,
Wayne, N6KR

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Wayne Burdick is the CTO of Elecraft, an avid outdoorsman, and the principal designer of the Elecraft models K1, K2, K3, K4, KX1, KX2, & KX3.



FARS Winter Banquet February 28th, 2020

Program to be Announced

Our Speaker to be Announced

February 28th, 2020 - 6:00PM

Michael's at Shoreline
2960 No. Shoreline Blvd.
Mountain View, CA
650-962-1014



ICOM IC-7300 HF Transceiver

Schedule

6:00 PM	Arrivals. Cash bar opens.
7:00 PM	Dinner is served.
8:00 PM	Program begins.
9:00 PM	Raffle and wrap up.

Meal Choices

Vegetarian	Spinach and Cheese Tortellini, Alfredo	\$33
Chicken	Breast of Chicken Florentine	\$39
Fish	Broiled Salmon, Lemon Beurre Blanc	\$46
Beef	Roast Prime Rib of Beef, au jus	\$53

We are raffling ~ \$1,500 in prizes.



Prizes include: ICOM IC-7300 HF Transceiver, UF818A Drone, CS-580 DMR HT Transceiver, Nano VNA Network Analyzer.

Use this form to sign-up by mail, or go on-line at k6ya.org/bq to sign-up. After February 20th, use the on-line sign-up instead of this form. If we receive your sign-up after February 24th, it will be handled as a [late sign-up](http://k6ya.org/bq). More information at: k6ya.org/bq. Mail this completed form with your **check, payable to FARS**, to:

FARS
 PO Box 112551
 Campbell, CA 95011-2551

FARS WINTER BANQUET SIGN UP FORM (February 28, 2020)

	Name & Call Sign	Meal Choice	Amount
You	_____	_____	_____
Email	_____		
Guest	_____	_____	_____
Guest	_____	_____	_____
Other (eg. Dues)	_____		
		Total	_____

Callsign Change:

**Bill Ashby, formerly
N6FFC, is now AA6FC.**

***Congratulations on obtaining
your Amateur Extra license!***

Passage of New By-Laws

**At the regular club meeting on January
8th, 2020, the membership unanimously
approved new governing By-laws. The
By-laws are available for review in the
secure members only area of the
club website www.wvara.org**

2020 West Valley Amateur Radio Association Board

President: Bill Fehring, W9KKN
Vice President: Jim Peterson, K6EI
Secretary: Mark Sayre, W6IA
Treasurer: Russ Blahetka, WD9DD
Past President: Bobby Barnett, K0XI

Directors:

Svend Jensen, KF6EMB, 2020
Kevin Smith, KK6VF, 2019-2020
Bill Ashby, N6FFC, 2020
Chuck Kamas, AD6CL, 2020-2021
Steve Sergeant, KC6ZKT, 2020-2021
Dave Schultheis, WB6KHP, 2020-2021

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